

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,147	<b>Applicant(s)</b> MCQUELLAN ET AL.
	<b>Examiner</b> PAUL DANNEMAN	<b>Art Unit</b> 3627

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 June 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-23 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8 June 2009 has been entered.

**Response to Amendment**

2. Claims 1-4, 9-10, 12, 19-21 have been amended.
3. Claims 22 and 23 are new.
4. Claims 1-23 are pending and have been examined in this action.

**Response to Arguments**

5. The Examiner respectfully withdraws the new matter objection under 35 U.S.C. § 131(a) and the rejection under 35 U.S.C. § 112 first paragraph of Claims 1, 19, 20 and 21 as applicant has amended the claims.

6. Applicants argue "*In contrast to the pending claims, Salvo does not teach, disclose or suggest monitoring inventory both 'at a first monitored location at a supplier workplace' and 'at a second monitored location at a customer workplace,' as recited in claim 1, for example.*" Respectfully, the Examiner must disagree. Salvo in at least Column 2, lines 57-67 and Column 3, lines 1-22 discloses a system and method for inventory management, in particular, vendor-managed inventory. The system and method provide information concerning inventory amounts and inventory ordering to a manufacturing site and an inventory vendor. For Applicant's edification the Examiner has included an article published by Scott Frahm, SCRC (Supply Chain Resource Cooperative) which defines vendor-

managed inventory (VMI) where the vendor assumes the role of inventory planning for the customer (manufacturer).

7. Applicants further argue "*Salvo further does not teach, disclose or suggest generating 'at least one data signal representative of respective amounts of the inventory material in the supplier's container at the supplier workplace and in the customer's container at the customer workplace' as recited in claim 1, for example.*" Respectfully, the Examiner must disagree. Salvo in at least Column 2, lines 57-61 discloses a system and method for vendor-managed inventory which provide information concerning inventory amounts and inventory ordering to a manufacturing site and an inventory vendor. Salvo in at least Column 3, lines 8-22 further discloses that the inventory management method provides inventory amounts and inventory ordering to a manufacturing site, an inventory vendor, or both. Salvo in at least Column 9, lines 33-57 further discloses that the inventory management system 100 can be vendor controlled (vendor-managed inventory) thereby increasing interaction between the manufacturing site and vendors. Salvo in at least Column 10, lines 9-26 further discloses that the inventory management system can rely on appropriately developed inventory policies for the benefit of another inventory management system 100. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill that Salvo discloses an inventory management system which can be implemented as "a vendor managed inventory system", "a manufacturer managed inventory system", and a "jointly managed inventory system". Also see the response to the previous argument above. Therefore Claim 1 and its dependent Claims 2-18 are properly rejected as well as independent Claim 19-21.

***Claim Rejections - 35 USC § 103***

8. **Claims 1-14 and 19-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Salvo et al., US 6,341,271 B1 hereafter known as Salvo.

**Claims 1, 2, 3, 19, 20, and 21:**

With regard to the limitations:

- *Measurement instrument sending signal representing amount of inventory in a container located at the supplier's and customer's location.*
- *Telemetry unit to send data from a measurement instrument located on each monitored container.*
- *A monitoring mail server receiving signal from Telemetry unit and converting it to inventory information.*
- *An inventory management server receiving from monitoring mail server inventory information for presentation on website.*

Salvo in at least Column 2, lines 57-67 and Column 3, lines 1-7 discloses an vendor-inventory managed system which has at least one storage receptacle for storing inventory, at least one amount indicator to determine the inventory in each receptacle, each amount indicator generating inventory amount signals representative of inventory amounts in the receptacle and a site controller 112 (Salvo, Column 4, lines 59-67 and Fig.1) that receives signals from the amount indicators and forwards the signals to the control unit 114 (Salvo, Column 5, lines 1-10) and converts the signals to determine the amount of inventory in each receptacle. Salvo in at least Column 5, lines 11-20 further discloses that the signals transmitted in the inventory management system may be either hardwired or wireless Ethernet signals and wireless Internet and web signals as well as other wireless connections. Salvo in at least Column 2, lines 57-61 discloses a system and method for vendor-managed inventory which provide information concerning inventory amounts and inventory ordering to a manufacturing site and an inventory vendor. Salvo in at least Column 3, lines 8-22 further discloses that the inventory management method provides inventory amounts and inventory ordering to a manufacturing site, an inventory vendor, or both. Salvo in at least Column 9, lines 33-57 further discloses that the inventory management system 100 can be vendor controlled (vendor-managed inventory) thereby increasing interaction between the manufacturing site and vendors. Salvo in at least Column 10, lines 9-26 further discloses that the inventory management system can rely on appropriately developed inventory policies for the benefit of another inventory management system 100. Therefore, it would have been obvious, at

the time of the invention, to one of ordinary skill that Salvo discloses an inventory management system which can be implemented as "a vendor managed inventory system", "a manufacturer managed inventory system", and a "jointly managed inventory system".

**Claim 4:**

With regard to the limitation:

- ***Container is one of a tank, bin, silo, vessel and storage arrangement.***

Salvo in at least Column 4, lines 12-22 discloses that the receptacles are any appropriate storage device, such as, but not limited to, a silo, storage bin, hopper, and bag, and combinations thereof.

**Claims 5, 6 and 13:**

With regard to the limitations:

- ***Inventory material is one of a gas, liquid, aging product, food product, fabricated component, hardware, raw material and physical good.***
- ***Measurement instrument is one of a Thermocouple, Ultrasonic Sensor, pressure sensor, sound sensor, or radar sensor.***
- ***Inventory material info is one of material identity, container level, inventory amount, inventory temperature, inventory flow rate, specific gravity, moisture content, weight, container specifications, network specifications, usage information, delivery information, user information and workplace information.***

Salvo does not specifically disclose the type of inventory material, *per se*. However, Salvo in at least Column 4, lines 31-44 discloses that the amount indicator used to provide signals indicative of an inventory amount includes a level sensor, weight indicator, volume analyzer, and other devices that permit determination of the amount of inventory in a receptacle. Furthermore the indicators may also measure amount influencing variables, such as, humidity and temperature. Salvo, in at least Column 4, lines 45-58 further discloses that the indicators may include

ultrasonic and ultrasound level detectors, optical sensors, laser amount sensing detection, nuclear amount sensing detectors, load cells and other devices capable of detecting amounts.

**Claim 14:**

With regard to the limitation:

- ***Website has one of Main Menu, Weekly Report, Daily Report, Individual Container Report, Delivery Entry, Delivery Summary, User Administration Menu and a Container/Location Administrator Menu.***

Salvo does not specifically disclose a website with periodic reports per se, however Salvo in at least Fig.2 discloses a web page containing real-time analyzed silo information and in Fig.3 further discloses a web page containing historical trend analyzed information for a receptacle at a manufacturing site. Salvo in at least Column 11, lines 18-36 further discloses that the inventory management system provides real-time, analyzed information concerning inventory in easily readable formats, including, but not limited to, formats accessible over the Internet. Alternatively, the inventory information can be accessed by voice mail, email, telephone, facsimile, Internet messages, pages, and other communication modes. Salvo in at least Column 11, lines 64-67 and Column 12, lines 1-13 and Fig.3 still further discloses a link for obtaining historical trend information and in Column 12, lines 14-18 still further discloses the analyzed and historical inventory information being encrypted and stored for reference and library purposes either locally or remotely.

**Claims 7, 8, 9, 10, 11, and 12:**

With regard to the limitations:

- ***Communication link between telemetry unit, measurement unit, and First server is a wired (Ethernet) or a wireless (RF, Wireless LAN).***

Salvo in at least Column 5, lines 11-20 further discloses that the signals transmitted in the inventory management system may be but not limited to either hardwired or wireless Ethernet

signals and wireless Internet and web signals as well as other wireless connections (radio signals, short-wave signals).

**Claims 22 and 23:**

With regard to the system limitations:

- ***A container with supplier's inventory at a supplier workplace;***
- ***A container with customer's inventory at a customer workplace;***

Salvo in at least Column 2, lines 57-61 discloses a system and method for vendor-managed inventory which provide information concerning inventory amounts and inventory ordering to a manufacturing site and an inventory vendor. Salvo in at least Column 3, lines 8-22 further discloses that the inventory management method provides inventory amounts and inventory ordering to a manufacturing site, an inventory vendor, or both.

Salvo in at least Column 9, lines 33-57 further discloses that the inventory management system 100 can be vendor controlled (vendor-managed inventory) thereby increasing interaction between the manufacturing site and vendors. Salvo in at least Column 10, lines 9-26 further discloses that the inventory management system can rely on appropriately developed inventory policies for the benefit of another inventory management system 100.

Salvo in at least Column 4, lines 12-22 discloses that the receptacles are any appropriate storage device, such as, but not limited to, a silo, storage bin, hopper, and bag, and combinations thereof.

- ***Inventory measurement instrument associated with the supplier's container;***
- ***Inventory measurement instrument associated with the customer's container;***

Salvo in at least Column 4, lines 31-44 discloses that the amount indicator used to provide signals indicative of an inventory amount includes a level sensor, weight indicator, volume analyzer, and other devices that permit determination of the amount of inventory in a receptacle. Furthermore the indicators may also measure amount influencing variables, such as, humidity and temperature. Salvo, in at least Column 4, lines 45-58 further discloses that the indicators may include ultrasonic and ultrasound level detectors, optical sensors, laser amount sensing

detection, nuclear amount sensing detectors, load cells and other devices capable of detecting amounts.

- *A telemetry unit in communication with each inventory measurement instrument and configured to receive and convert data signals into inventory information;*
- *A monitoring mail server in communication with the telemetry unit and configured to receive inventory information from the telemetry unit;*
- *A second server in communication with the monitoring mail server configured to receive and process inventory information from the mail server via an Internet connection;*

Salvo in at least Column 2, lines 57-67 and Column 3, lines 1-7 discloses an vendor-inventory managed system which has at least one storage receptacle for storing inventory, at least one amount indicator to determine the inventory in each receptacle, each amount indicator generating inventory amount signals representative of inventory amounts in the receptacle and a site controller 112 (Salvo, Column 4, lines 59-67 and Fig.1) that receives signals from the amount indicators and forwards the signals to the control unit 114 (Salvo, Column 5, lines 1-10) and converts the signals to determine the amount of inventory in each receptacle. Salvo in at least Column 7, lines 39-54 further discloses that the analyzed information sent by the control unit 114 is typically provided to a vendor 200 who makes inventory. The vendor 200 is able to schedule manufacture of inventory in order to meet the demands of the manufacturing site 103. The analyzed information between the vendor 200 and the control unit 114 comprises signals sent by at least one of hardwired connections and wireless connections. Salvo in at least Column 5, lines 11-20 further discloses that the signals transmitted in the inventory management system may be either hardwired or wireless Ethernet signals and wireless Internet and web signals as well as other wireless connections.

- *A wireless communication link between the measurements and the telemetry unit, wherein the wireless communication link comprised at least one of radio frequency, IEEE 802.11 wireless LAN or Bluetooth technology.*

Salvo in at least Column 5, lines 11-20 further discloses that the signals transmitted in the inventory management system may be but not limited to either hardwired or wireless Ethernet signals and wireless Internet and web signals as well as other wireless connections (radio signals, short-wave signals).

9. **Claims 15-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Salvo as applied to claim 1 above, and further in view of SOAP (P1-P4) (<http://xml.coverpages.org/soap.html>).

**Claims 15, 16, 17, and 18:**

With regard to the limitations:

- *One of the servers is configured to process one message and notification;*
- *Notification is one of Delivery, Inventory Level, or System Alert.*
- *Message and Notification are XML messages including Inventory information.*
- *Notification is a SOAP message, including Inventory Information.*

Salvo does not disclose the use of XML or SOAP messages per se. However, Salvo in at least Column 7, lines 55-67 discloses that the analyzed information is typically accessible anywhere and at any time, for example by phone, voice mail, fax, overnight and regular mail, courier and over the Internet. Salvo in at least Column 8, lines 5-25 discloses an alert generated by the control unit in response to the real-time pricing feature exceeding a limit. Salvo in at least Column 8, lines 51-59 further discloses the control unit and service center sending alerts to plant management at the manufacturing site and vendors when a critical event occurs such as shortages in inventory. The alerts are communicated via regular mail, email, telephone, pagers, facsimile, Internet messages and similar communications. It would have obvious, at the time of the invention, to one of ordinary skill in the art to modify Salvo by combining XML and SOAP as the messaging protocol since Salvo sends messages to various types of devices which use various formatting standards. The use of XML and SOAP allows for messages to be sent in a

plain format where the message will be formatted based on the end message receiving terminal's capability.

#### **Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL DANNEMAN whose telephone number is (571)270-1863. The examiner can normally be reached on Mon.-Thurs. 6AM-5PM Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Florian Zeender can be reached on 571-272-6790. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul Danneman/  
Examiner, Art Unit 3627  
24 August 2009

/F. Ryan Zeender/  
Supervisory Patent Examiner, Art Unit 3627